

## AMENDMENTS TO THE CLAIMS

Please cancel claims 2 and 4 and amend claims 3 and 5-10, as follows:

1. (Currently amended) A semiconductor device comprising:

B<sup>1</sup>  
a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

fig 1  
wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region, the diode including a second conductivity type region embedded in the first conductivity type semiconductor region in a region crossing over a boundary of the contact region, the second conductivity type region having a conductivity type different from that of the first conductivity type semiconductor region, the second conductivity type region being in contact with the electrode in the contact region.

2. (canceled)

3. (Currently amended) A semiconductor device as set forth in claim 2 1, wherein a universal contact structure including the second conductivity type region is provided in the contact region with the second conductivity type region in contact with the boundary portion of the contact region electrode.

4. (canceled)

5. (Currently amended) A semiconductor device as set forth in ~~any of claims 1 to 4~~ or claim 3, wherein the diode is provided adjacent a surface of the first conductivity type semiconductor region.

6. (Currently amended) A semiconductor device ~~as set forth in any of claims 1 to 4,~~ comprising:

a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region, and

wherein the contact region has a generally C-shape or a ring shape which surrounds the second conductivity type semiconductor region on the surface of the first conductivity type semiconductor region.

7. (Currently amended) A semiconductor device as set forth in any of claims 1, 3 and 6 ~~to 4~~, wherein the diode is provided at least in a part of the boundary portion of the contact region facing the second conductivity type semiconductor region.

8. (Currently amended) A semiconductor device as set forth in any of claims 1, 3 and 6  
~~to~~ 4, wherein the diode is provided in the entire boundary portion of the contact region.

B<sup>1</sup>  
9. (Currently amended) A semiconductor device as set forth in any of claims 1, 3 and 6  
~~to~~ 4, wherein a bonding region is defined on the first conductivity type semiconductor region  
for bonding a wire to the electrode, and the diode is provided at least in a part of the boundary  
portion of the contact region adjacent to the bonding region.

10. (Currently amended) A semiconductor device as set forth in any of claims 1, 3 and 6  
~~to~~ 4, wherein the functional element is a bipolar transistor which comprises a base region  
defined by the first conductivity type semiconductor region, and an emitter region defined by  
the second conductivity type semiconductor region.

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